

12-14-01

L3 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:365099 CAPLUS
DOCUMENT NUMBER: 135:142755
TITLE: **Solubilization** of new benzimidazolone-sugar derivatives in diverse micellar solutions and microemulsions
AUTHOR(S): El amrani, M.; Azemar, N.; Lahrissi, B.; Comelles, F.; El Midaoui, A.; Garcia-Celma, M. J.; Solans, C.; Massoui, M.
CORPORATE SOURCE: UFR Agroressources et Chimie Fine, Univ. Ibn Tofail, Kenitra, Morocco
SOURCE: Comun. Jorn. Com. Esp. Deterg. (2001), 31, 313-324
CODEN: CJCDD7; ISSN: 0212-7466
PUBLISHER: Comite Espanol de la Detergencia, Tensioactivos y Afines
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Benzimidazolone-sugar derivs., new mols. with very low water solv., have been **solubilized** in the following colloidal systems: (1) Triton X100 micelles, (2) mixed micelles Triton X100/lecithin, and (3) microemulsions of the Water/Triton X100/Butyl lactate system. **Solubilization** of these mols. in microemulsions was studied as a function **solubilizate** alkyl chain length as well as the nature of the substituent (H, Cl, CH₃). Moreover, the influence of the **solubilizate** on crit. micellar concn., area occupied by adsorbed mol. at the liq./air interface and size of the micellar and microemulsion aggregates was detd. A micelle-vesicle transition through water diln. of mixed micelles with and without benzimidazolone **solubilizate** has been evidenced.
REFERENCE COUNT: 18
REFERENCE(S):
(2) Dennis, E; Adv Colloid Interface Sci 1986, V26, P155 CAPLUS
(3) Dennis, E; Solution Chemistry of Surfactants 1979, P175 CAPLUS
(4) Edwards, K; Langmuir 1989, V5, P473 CAPLUS
(5) El Amrani, M; Jorn Com Esp Deter 2000, V30, P245 CAPLUS
(6) Kamenka, N; J of Colloid Interface Sci 1991, V143, P463 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:677611 CAPLUS
DOCUMENT NUMBER: 133:274260
TITLE: Process for producing liquid-jet recording head with high precision and reliability
INVENTOR(S): Shimomura, Akihiko; Imamura, Isao; Shiba, Shoji
PATENT ASSIGNEE(S): Canon K. K., Japan
SOURCE: U.S., 13 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6123863	A	20000926	US 1996-772122	19961220

PRIORITY APPLN. INFO.: JP 1995-334935 A 19951222

AB A process for producing a liq.-jet recording head comprises the steps of producing a solid layer from a photosensitive material that is **solubilized** by active radiation in a pattern of a liq. path on a substrate, providing at least a portion of a liq. path forming material

comprising a resin on the substrate having the solid layer, and removing the solid layer from the substrate, wherein the solid layer is removed by use of at least one of Me lactate, Et lactate, and Bu lactate, or a solvent contg. .gtoreq.1 of them as a main component. This process using these solvents produces a liq.-jet recording head with less variation of the discharge opening shape with high resistance to contamination by foreign matter and less tendency for swelling of the liq. path wall.

REFERENCE COUNT: 19
REFERENCE(S):
(1) Anon; JP 54-56847 1979 CAPLUS
(2) Anon; JP 59-123670 1984
(3) Anon; JP 59-138461 1984
(4) Anon; JP 60-71260 1985
(15) Noguchi; US 4657631 1987 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:281756 CAPLUS
DOCUMENT NUMBER: 133:45209
TITLE: **Solubilization** of new benzimidazolone-sugar derivatives in water/nonionic surfactant/butyl lactate microemulsions
AUTHOR(S): El Amrani, M.; Lahrissi, B.; El Midaoui, A.; Massouli, M.; Azemar, N.; Solans, C.; Garcia-Celma, M. J.; Comelles, F.
CORPORATE SOURCE: UFR Agroressources et Chimie Fine, Faculte des Sciences, Universite Ibn Tofail, Kenitra, Morocco
SOURCE: Comun. Jorn. Com. Esp. Deterg. (2000), 30, 245-255
CODEN: CJCDD7; ISSN: 0212-7466
PUBLISHER: Comite Espanol de la Detergencia, Tensioactivos y Afines
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Microemulsions are colloidal solns. with high **solubilization** capacity for both polar and nonpolar mols. The objective of this work was to det. the suitability of microemulsions with high water content to **solubilize** benzimidazolone sugar derivs., new mols. with very low water solv. Microemulsions of water/nonionic surfactant/butyl lactate systems were selected by means of phase behavior studies. Their structures were assessed by dynamic light scattering.
Solubilization of the benzimidazolone sugar ether derivs. in microemulsions with water concn. >90 wt.% was studied as a function of sugar ether alkyl chain length of the **solubilizate** as well as the nature of the heterocycle substituents (H, Me, Cl). The results showed that when the alkyl chain length increases, **solubilization** decreases. Moreover, for a given benzimidazolone deriv. concn., microemulsion droplet size is not significantly changed with the alkyl chain length.

REFERENCE COUNT: 13
REFERENCE(S):
(1) Balzer, D; Specialist Surfactants 1997, P169 CAPLUS
(3) Kahlweit, M; Langmuir 1996, V12, P861 CAPLUS
(5) Lahrissi, B; Jorn Com Esp Deter 1999, V29, P501 CAPLUS
(6) Nagadome, S; Colloid Polym Sci 1995, V273, P675 CAPLUS
(7) Remond, G; J Med Chem 1997, V32, P843 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:197912 CAPLUS
DOCUMENT NUMBER: 132:218350
TITLE: **Solubilizers** and insecticidal solutions containing them
INVENTOR(S): Kubo, Yukiya; Tsutsumi, Shusaku; Hasegawa, Takahiro

PATENT ASSIGNEE(S): Earth Chemical Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000086403	A2	20000328	JP 1998-249973	19980903
JP 2001163702	A2	20010619	JP 2000-373110	19980903

PRIORITY APPLN. INFO.: JP 1998-249973 A3 19980903
AB N-methyl-2-pyrrolidone (I), N-ethyl-2-pyrrolidone, .gamma.-butyrolactone, di-Me carbonate, di-Et carbonate, Me lactate, Et lactate, and Bu lactate are useful as **solubilizers** for insecticides. The solv. of metoxadiazone in I was 40 wt.%.

L3 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:343109 CAPLUS
DOCUMENT NUMBER: 131:149048
TITLE: **Solubilization** of a sunscreen in a system containing alkylpolyglucoside and butyl lactate
AUTHOR(S): Comelles, F.; Sanchez Leal, J.
CORPORATE SOURCE: Depto. Tecnologia Tensioactivos, CID/CSIC, Barcelona, 08034, Spain
SOURCE: Comun. Jorn. Com. Esp. Deterg. (1999), 29, 491-500
CODEN: CJCDD7; ISSN: 0212-7466
PUBLISHER: Comite Espanol de la Detergencia, Tensioactivos y Afines
DOCUMENT TYPE: Journal
LANGUAGE: Spanish
AB The possibility of **solubilizing** ethylhexyl-p-methoxycinnamate as a lipophilic sunscreen with a fragrance in transparent liq. formulations was studied. The ratios between the ingredients of the system, including alkyl polyglucoside as nonionic surfactant, Bu lactate as cosurfactant, propylene glycol as cosolvent and deionized water, were optimized. Previous studies demonstrated a higher capacity to **solubilize** hydrophobic mols. in isotropic liq. formulations showing transparency, low viscosity corresponding structurally to microemulsions through light scattering observations. Both alkyl polyglucoside and Bu lactate are obtained from renewable sources and are considered as safe and biodegradable products. Moreover, besides its cosolubilizing action, propylene glycol provide and emollient touch to the sunscreen lotions.
REFERENCE COUNT: 3
REFERENCE(S):

- (1) Comelles, F; J Dispersion Sci And Technol 1999, V20(1&2), P491
- (2) Comelles, F; J Dispersion Sci and Technol 1997, V18(2), P161 CAPLUS
- (3) Comelles, F; J Dispersion Sci and Technol (En prensa)

L3 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:126321 CAPLUS
DOCUMENT NUMBER: 128:194004
TITLE: Abrasive cleaning of fluid delivery systems, cleaning kits, and abrasive cleaning compositions
INVENTOR(S): Roelofs, Robert R.; Warren, Jonathan N.; Deneau, Robert N.
PATENT ASSIGNEE(S): PPG Industries, Inc., USA
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9806802	A1	19980219	WO 1997-US12738	19970722
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE			
AU 9737350	A1	19980306	AU 1997-37350	19970722
EP 923632	A1	19990623	EP 1997-934247	19970722
R: DE, ES, FR, GB, IT				
PRIORITY APPLN. INFO.:			US 1996-689751	19960813
			WO 1997-US12738	19970722

AB The title method comprises passing through the system (a) an abrasive cleaner compn. comprising .gtoreq.1 liq. carrier contg. **solubilizable** abrasive particles, at least some of which are in nonsolubilized form, to abrade the paint to be removed from the interior surfaces, and (b) rinsing the system with .gtoreq.1 fluid effective to (i) displace the carrier and (ii) remove the abrasive particles, at least partially by means such as dissolv. or decompn. or neutralization. Optionally, a pretreatment fluid can be used first to soften or loosen the paint deposit. A rinsing fluid is comprised of H₂O and .gtoreq.1 of org. solvents, acids, amines, and mixts.

L3 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:468632 CAPLUS
DOCUMENT NUMBER: 122:215912
TITLE: Recovery of hydroxy acids from trash
INVENTOR(S): Brake, Loren Dale; Drysdale, Neville Everton;
Subramanian, Narayanan Samakara
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 628533	A1	19941214	EP 1993-109098	19930607
R: CH, DE, FR, GB, LI				
CA 2098220	AA	19941211	CA 1993-2098220	19930611
JP 07011044	A2	19950113	JP 1993-143107	19930615
PRIORITY APPLN. INFO.:			EP 1993-109098	19930607

OTHER SOURCE(S): MARPAT 122:215912

AB A method for recovering valuable hydroxy acid from a poly(hydroxy acid)-contg. source comprises (A) contacting the source with a **solubilizing** fluid in an amt. of .gtoreq.1 1 mol **solubilizing** fluid per mol of hydroxy acid equiv. present in the source, the **solubilizing** fluid being selected from (1) water, (2) C₁-6 alcs., (3) mixts. of water and the alcs., (4) amines HNR₁R₂ (R₁, R₂ = H, C₁-4 alkyl); (5) liq. media contg. diamines R₃NHR₅NHR₄ (R₃, R₄ = H, C₁-4 alkyl, or R₃ and R₄ may join to form a heterocyclic ring; R₅ = C₂-12 alkylene, phenylene); and (6) mixts. of the amines and/or diamines with water and/or C₁-6 alcs.; (B) maintaining the resulting mixt. at sufficient temp. and pressure for a sufficient time to at least partially **solubilize** the polymer and form a liq. phase of enhanced monomer and/or oligomer hydroxy acid value; and (C) isolating and recovering the liq. phase. Thus, a mixt. of 75 g polylactide (mol. wt. 300,000) and 38 g

water was heated at 150.degree. and 95 psi for 1 h to give an 80% fluid of lactic acid.

L3 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1994:325953 CAPLUS
DOCUMENT NUMBER: 120:325953
TITLE: Oil-based black jet-printing inks
INVENTOR(S): Nishimoto, Tomohisa; Takahashi, Hiroshi; Nasukawa, Makoto
PATENT ASSIGNEE(S): Pentel Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05320558	A2	19931203	JP 1992-154472	19920521

AB Title inks, storage-stable with good delivery, comprise nigrosine, lactic acid and/or its ester, aliph. alcs., and resins sol. in the aliph. alcs. Thus, a mixt. of Nigrosine Base EX 12, EtOH 49, iso-Pr alc. 20, Et lactate 14, and Halon 110H (ketone resin) 5 parts showed good delivery, produced sharp markings after 1-mo storage at 50.degree., and good solv. of the dye after 3-mo storage at 50.degree..

L3 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1993:678570 CAPLUS
DOCUMENT NUMBER: 119:278570
TITLE: An experimental method for determining the Hildebrand **solvability** parameter of organic nonelectrolytes
AUTHOR(S): Lin, Ho Meei; Nash, Robert A.
CORPORATE SOURCE: Coll. Pharm. Allied Health Prof., St. John's Univ., Jamaica, NY, 11439, USA
SOURCE: J. Pharm. Sci. (1993), 82(10), 1018-26
CODEN: JPMSAE; ISSN: 0022-3549
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A three-solvent system was used to det. the Hildebrand solv. parameters of org. nonelectrolytes. The exptl. Hildebrand solv. parameter represents a weighted av. of the mole fraction **solvabilities** of the solute in three individual solvents (Et acetate, 1-propanol, and 1,2-propanediol). The solvent system estd. the Hildebrand solv. parameters of solutes within a range from 8.9 to 14.8 (cal/cm³)¹². Deviations ranged from 0.8 to 12.9%, with the highest value at the extreme and well within 10% at the median. Estn. of the Hildebrand solv. parameters of solutes within a wider range and with somewhat better accuracy was made with a five-solvent system (hexane, Et acetate, 1-propanol, 1,2-propanediol, and water).

L3 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1988:544096 CAPLUS
DOCUMENT NUMBER: 109:144096
TITLE: The affinities of organic solvents in biological systems
AUTHOR(S): Hansen, Charles M.; Andersen, Birte Hoegh
CORPORATE SOURCE: Scandinavian Paint Print. Ink Res. Inst., Horsholm, Den.
SOURCE: Am. Ind. Hyg. Assoc. J. (1988), 49(6), 301-8
CODEN: AIHAAP; ISSN: 0002-8894
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The affinities of org. solvents in biol. systems are described using solv.

parameter techniques. Materials studied include lard, water, blood serum, sucrose, urea, keratin, and lignin. The tendency for org. solvents to collect in fatty material, swell (penetrate) the skin, absorb into wood, or preferentially transfer to aq. media, for example, can be estd. rapidly for any of the solvents for which solv. parameters are available.

L3 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1987:158320 CAPLUS
DOCUMENT NUMBER: 106:158320
TITLE: Studies on the suitability of solvents for drycleaning. Part 1. The influence of the solvent characteristics on **solvability** of fatty acids
AUTHOR(S): Isoi, Keiko; Kojima, Yoji; Kazama, Ken
CORPORATE SOURCE: Mukogawa Women's Univ., Hyogo, Japan
SOURCE: Sen'i Seihin Shohi Kagaku (1986), 27(8), 352-9
CODEN: SESKB9; ISSN: 0037-2072
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB The solvent characteristics affecting the solv. of fatty acids were detd. The solvating power of each solvent was explained by three characteristics; solv. parameter (SP value), three kinds of intermol. forces, and groups in the mol. Out of 81 solvents, the solvating power of 53 solvents was explained by SP value, of 8 by intermol. forces, and 11 by the groups in the mol., while the solvating power of the remaining 9 solvents was unexplainable.

L3 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1986:174501 CAPLUS
DOCUMENT NUMBER: 104:174501
TITLE: A method of predicting percutaneous absorption rates from vehicle to vehicle: an experimental assessment
AUTHOR(S): Dugard, Paul H.; Scott, Robert C.
CORPORATE SOURCE: Cent. Toxicol. Lab., Imp. Chem. Ind. Ltd., Macclesfield, UK
SOURCE: Int. J. Pharm. (1986), 28(2-3), 219-27
CODEN: IJPHDE; ISSN: 0378-5173
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The solv. of water in a range of polar solvents was detd. The absorption rate of tritiated water from half-satd. solns. of water in each of the solvents (vehicles) was measured through human abdominal epidermis in vitro and results were expressed as permeability consts. In agreement with theory, the tritiated water permeability const. was inversely proportional to the mole fraction solv. of water in the vehicles. This change in permeability const. with the reciprocal of solv. was attributable to changes in the stratum corneum: vehicle partition coeff. whereas no distinct solv.-related variations in the calcd. stratum corneum diffusion const. were apparent. These results are in accord with skin permeability and thermodn. theory which, for a particular penetrant, indicate that the absorption rate will be proportional to the thermodn. activity of the penetrant in the vehicle if the properties of the stratum corneum are not changed by the vehicles. The comparison of penetrant **solvabilities** provides 1 means of relating the thermodn. activity in 1 vehicle to that in another. Thus measurement of the percutaneous absorption rate (or a related parameter) for a penetrant in 1, or preferably several, vehicles may permit calcns. of absorption rates from other vehicles based on solv. data. The relationships employed in the calcns. are: absorption rate equals permeability const. multiplied by the applied concn. and permeability consts. are inversely proportional to the mole fraction **solvabilities** of the penetrant in the vehicles. This predictive treatment should be equally successful whether based on in vitro or in vitro measurements of absorption rates.

L3 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1986:95235 CAPLUS
 DOCUMENT NUMBER: 104:95235
 TITLE: Using **solubility** parameters in cosmetics formulation
 AUTHOR(S): Vaughan, C. D.
 CORPORATE SOURCE: Cosmair Inc., Clark, NJ, 07066, USA
 SOURCE: J. Soc. Cosmet. Chem. (1985), 36(5), 319-33
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: English
 AB The solv. parameters of more than 100 cosmetic ingredients were calcd. with a BASIC computer program, and tabulated. The solv. of benzalphthalide [575-61-1], a potential sunscreen and a polar compd., was detd. in 11 solvents, and the results were plotted against solv. parameter of the solvents and against solv. parameter and dielec. const. Polarity contributes increased precision in estn. of solv. Among nonpolar cosmetic materials, the solv. parameter is the major contributor to effects of solv. Development of the Hildebrand solv. parameter and its application and detn. are reviewed with 45 refs. The solv. parameters of 50 cosmetic ingredients are tabulated.

L3 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1974:544276 CAPLUS
 DOCUMENT NUMBER: 81:144276
 TITLE: Developer composition for a light-sensitive lithographic printing material
 INVENTOR(S): Kobayashi, Kesanao; Yonezawa, Teruhiko; Nishikawa, Nobuo
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd.
 SOURCE: Ger. Offen., 22 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2364631	A1	19740704	DE 1973-2364631	19731224
JP 49088603	A2	19740824	JP 1973-2538	19721229

PRIORITY APPLN. INFO.: JP 1973-2538 19721229
 AB A homogeneous H₂O-base developer for light-sensitive polymers used in lithog. plate prodn. has .ltoreq.20% org. solvent, an anionic or nonionic surfactant or an auxiliary solvent to fully **solvabilize** the main solvent, and may contain an acid or other ingredient to make the nonexposed areas more hydrophilic. The main solvent has a solv. in H₂O of <10%. Thus, an anodized Al plate was coated with a soln. contg. a condensation product (mol. wt. 100,000) of equimolar p-phenylene diacrylate and p-bis(hydroxyethoxy)cyclohexane 100, 1-methyl-2-benzoylmethylene-.beta.-naphthothiazoline 8, phth-alocyanine blue 20, hydroquinone 2, and CH₂Cl₂ 3500 parts, imagewise exposed using a C arc lamp, and developed with 300 ml/m² of benzyl alc. 3, glycerol 2, 80% H₃PO₄ 0.2, a Na alkyl-benzenesulfonate 0.8, and H₂O 100 parts. The nonexposed areas were removed by lightly rubbing with cotton. The printed halftone image was sharp and clean. A developer contg. AcOBu 7, 50% lactic acid 20, and H₂O 100 parts gave similar results, but without rubbing with cotton.

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FILE 'REGISTRY' ENTERED AT 13:21:50 ON 14 DEC 2001

L1 1 S 138-22-7/RN

FILE 'CPLUS' ENTERED AT 13:22:18 ON 14 DEC 2001

L2 289 S L1

L3 14 S L1 AND SOLUBIL?